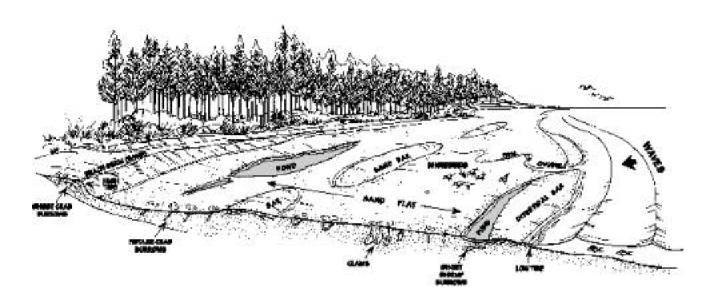
Exposed Tidal Flats

# **INTERTIDAL**



## **Exposed Tidal Flats**

# INTERTIDAL Description

- Exposed tidal flats are broad intertidal areas composed primarily of sand and minor amounts of gravel.
- The presence of sand indicates that tidal currents and waves are strong enough to mobilize the sediments.
- They are usually associated with another shoreline type on the landward side of the flat, though they can occur as separate shoals; they are commonly associated with tidal inlets.
- Biological use can be very high, with large numbers of infauna, heavy use by birds for roosting and foraging, and use by foraging fish.

#### **Predicted Oil Behavior**

- Oil does not usually adhere to the surface of exposed tidal flats, but rather moves across the flat and accumulates at the high-tide line.
- Deposition of oil on the flat may occur on a falling tide if concentrations are heavy.
- Oil does not penetrate water-saturated sediments, but may penetrate coarse-grained sand and coat gravel.
- Biological damage may be severe, primarily to infauna, thereby reducing food sources for birds and other predators.

## **Response Considerations**

- Currents and waves can be very effective in natural removal of the oil.
- The use of heavy machinery should be restricted to prevent oil mixing into the sediments.

### **Oil Category Descriptions**

- I Gasoline products
- II Diesel-like products and light crudes
- III Medium grade crudes and intermediate products
- IV Heavy crudes and residual products
- V Non-floating oil products

The following categories are used to compare the relative environmental impact of each response method in the specific environment and habitat for each oil type. The codes in each table mean:

- A = The least adverse habitat impact.
- B = Some adverse habitat impact.
- C = Significant adverse habitat impact.
- D = The most adverse habitat impact.
- I = Insufficient information impact or effectiveness of the method could not be evaluated.
- -= Not applicable.

oit dategory				
I	II	III	IV	V
Α	Α	Α	Α	Α
В	В	В	В	В
-	С	В	В	В
-	D	D	D	D
-	Α	Α	В	В
-	С	В	В	В
-	В	В	В	В
-	-	С	С	С
-	D	D	D	D
-	Α	Α	Α	В
-	В	В	С	С
-	-	-	_	-
-	-	-	-	-
-	-	-	_	-
-	-	-	-	-
-	-	-	-	-
-	С	С	-	-
-	-	-	-	-
-	I	I	I	I
-	I	I	I	I
-	-	-	_	-
	B	A A B B C C C D A C B C B C C B C C B C C C C C C C C C	I II III  A A A A B B B B C C B C B C D D D C A A A C C B B C C C C C C C C C C C C C C C C	I II III IV  A A A A A A B B B B B C C B B B C C B B B C C B B B B

Oil Category

Consult the Environmental Considerations for Marine Oil Spill Response document referenced on page 5 before using this table.